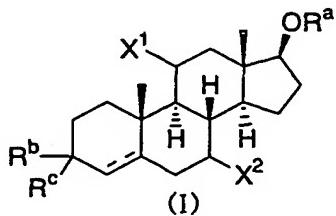


Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A compound represented by the general formula (I), pharmaceutically acceptable salts thereof, or prodrugs of the compound or its salts:



{wherein X¹ represents a hydrogen atom and X² represents independently a hydrogen atom or represents a group represented by the general formula (II)}

-Ar-A-R¹ (II)

R^a represents a hydrogen atom or a protective group of a hydroxyl group, R^b and R^c, when taken together with the carbon atom in 3-position to which they are bound, represent an optionally protected -(C=O)-, and the dashed line in combination with the solid line represents the formation of a

~~single bond or a double bond;~~

in addition, Ar represents a single bond or an aromatic hydrocarbon group, A represents a methylene group or -O-, R¹ represents an optionally substituted alkyl group, an optionally substituted alkenyl group or an optionally substituted alkynyl group;

provided that when R^a represents a hydrogen atom and R^b and R^c represent -(C=O)-, X² is not a propyl group or an allyl group [X¹ and X² are not a hydrogen atom at the same time].

2. (Currently Amended) The compound according to claim 1, pharmaceutically acceptable salts thereof, or prodrugs of the compound or its salts, wherein R¹ is R^{1a} [where R^{1a} is the general formula (III)]

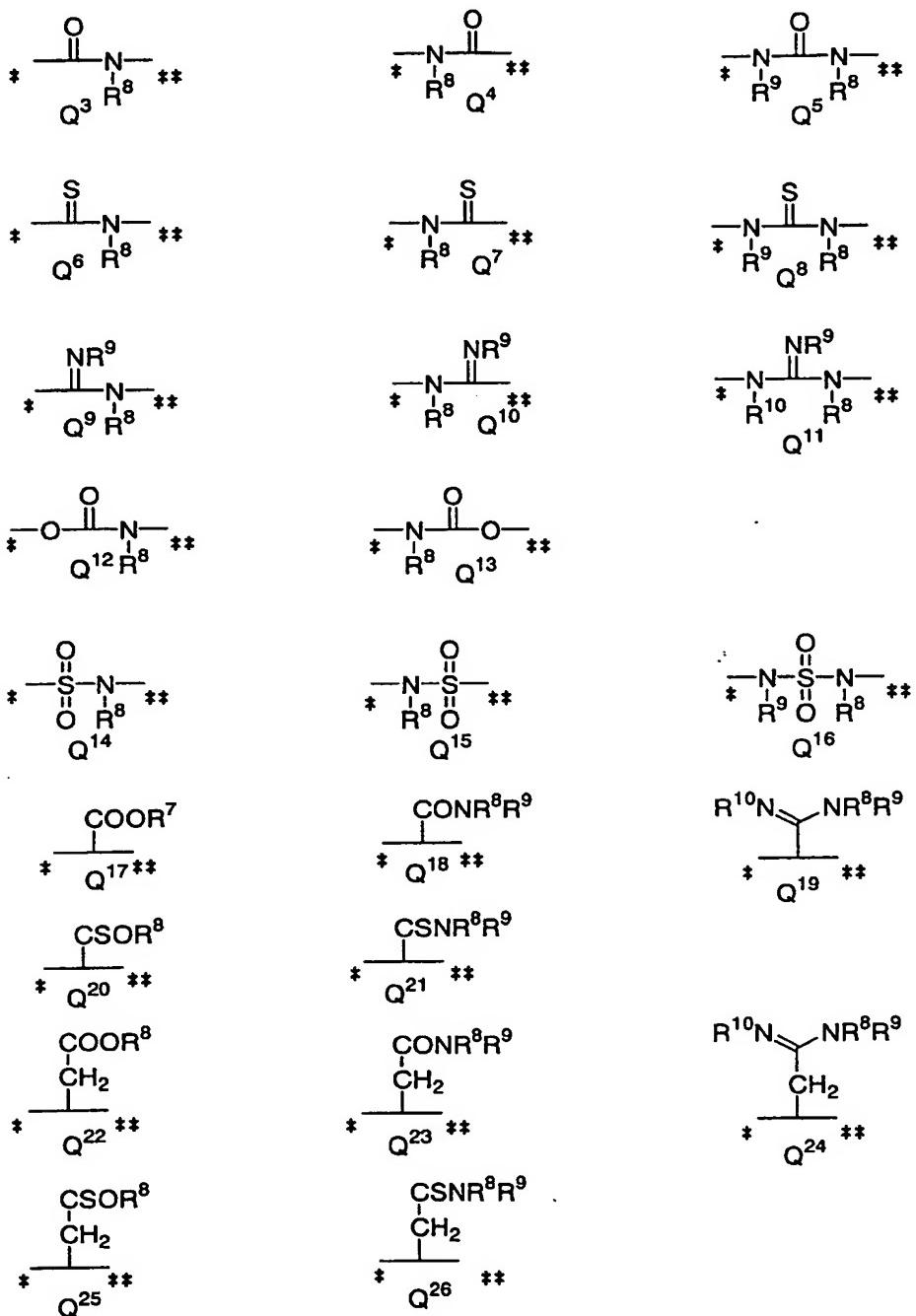
-G-E-J-Y-L-Q-Z (III)

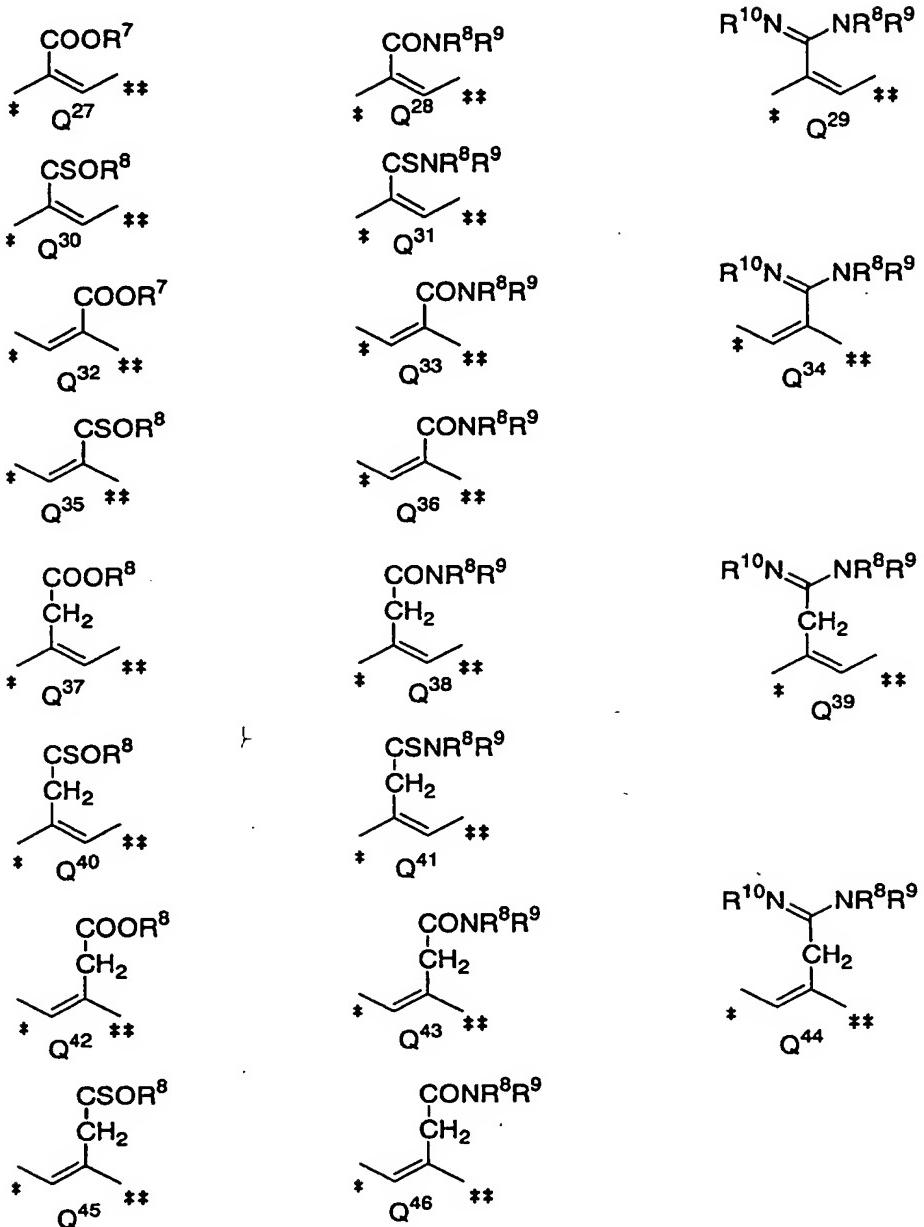
{wherein G represents an optionally substituted straight-chained or branched alkylene group having 1 - 30 carbon atoms, an optionally substituted straight-chained or branched alkenylene groups having 2 - 30 carbon atoms or an optionally substituted straight-chained or branched alkynylene group having 2 - 30 carbon atoms, E represents a single bond or -O-, J represents a single bond, an optionally substituted aromatic hydrocarbon group or an optionally substituted

Amd. dated September 21, 2004

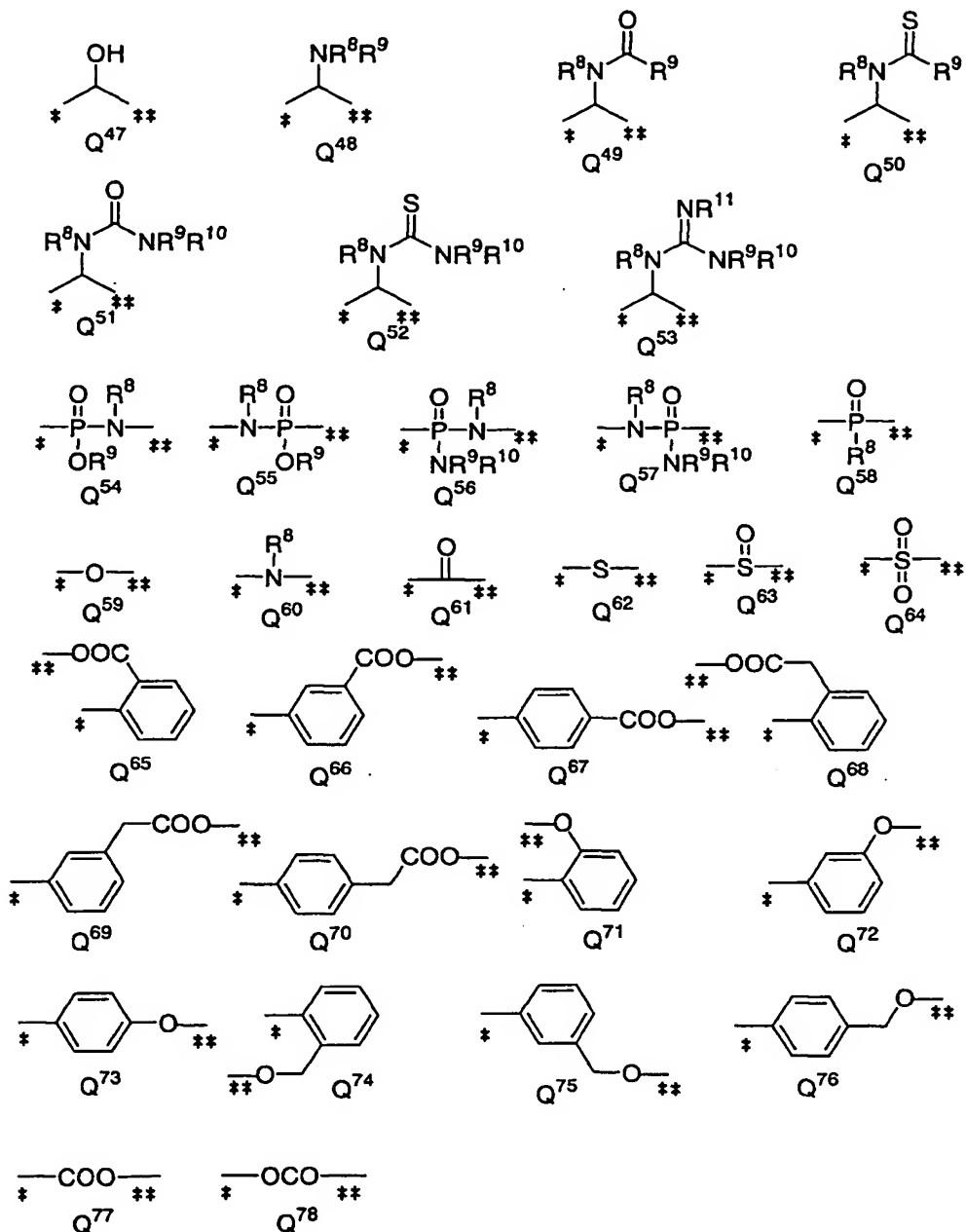
Reply to Office Action of January 30, 2004 and September 15, 2004

heterocyclic group, Y represents a single bond or -O-, L represents a single bond, a straight-chained or branched alkylene group having 1 - 10 carbon atoms, a straight-chained or branched alkenylene group having 2 - 10 carbon atoms or a straight-chained or branched alkynylene group having 2 - 10 carbon atoms, Q represents a single bond or one group selected from among the following formulae:





and



(where R⁷ and R⁸ represent independently a hydrogen atom or a straight-chained or branched lower alkyl group having 1 - 6 carbon atoms, R⁹, R¹⁰ and R¹¹ each independently represent a hydrogen atom or a straight-chained or branched lower alkyl group having 1 - 3 carbon atoms), Z represents a hydrogen

atom, a straight-chained or branched alkyl group having 1 - 10 carbon atoms that may optionally be substituted by a halogen atom, a straight-chained or branched alkenyl group having 2 - 10 carbon atoms that may optionally be substituted by a halogen atom, a straight-chained or branched alkynyl group having 2 - 10 carbon atoms that may optionally be substituted by a halogen atom, -O-R^d (where R^d represents a hydrogen atom or a protective group of a hydroxyl group), or -COOH}, provided that when Q is Q³, the nitrogen atom and R⁸ in Q³ may combine with Z to form a heterocyclic group}].

3. (Previously Presented) The compound according to claim 2, a pharmaceutically acceptable salt thereof, or a prodrug of said compound or its salt thereof, wherein Q is Q² (where Q² represents a single bond), Q⁶², Q⁶³, Q⁶⁴, Q³ (where R⁸ has the same meaning as defined above), Q⁴ (where R⁸ has the same meaning as defined above), Q¹⁷ (where R⁷ has the same meaning as defined above), Q³² (where R⁷ has the same meaning as defined above) or Q²⁷ (where R⁷ has the same meaning as defined above).

4. (Previously Presented) The compound according to claim 1, a pharmaceutically acceptable salt thereof, or a prodrug of said compound or a salt thereof, wherein X¹ is -Ar-A-R¹ (wherein Ar, A and R¹ have the same meanings as defined

above) and X² is a hydrogen atom.

5. (Currently Amended) The compound according to claim 1, a pharmaceutically acceptable salt thereof, or a prodrug of said compound or a salt thereof, wherein X¹ is a hydrogen atom and X² is -Ar-A-R¹ (wherein Ar, A and R¹ have the same meanings as defined above in claim 1).

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) The compound according to claim 1, a pharmaceutically acceptable salt thereof, or a prodrug of the compound or its salt, wherein the steric configuration of X² in 7-position is α -configuration.

9. (Currently Amended) The compound according to claim 2, a pharmaceutically acceptable salt thereof, or a prodrug of the compound or its salt, wherein Z is a straight-chained or branched alkyl group having 1 - 10 carbon atoms which optionally is substituted by a halogen atom.

10. (Original) The compound according to claim 9, pharmaceutically acceptable salts thereof, or prodrugs of the compound or its salts, wherein Z is a 4,4,5,5,5-pentafluoropentyl group.

11. (Previously Presented) The compound according to claim 2, a pharmaceutically acceptable salt thereof, or a prodrug of the compound or its salt, wherein J is a single bond.

12. (Previously Presented) The compound according to claim 1, a pharmaceutically acceptable salt thereof, or a prodrug of the compound or its salt, wherein Ar is a single bond.

13. (Previously Presented) The compound according to claim 1, a pharmaceutically acceptable salt thereof, or a prodrug of the compound or its salt, wherein A is a methylene group.

14. (Previously Presented) The compound according to claim 2, a pharmaceutically acceptable salt thereof, or a prodrug of the compound or its salt, wherein Q is Q⁶², Q⁶³ or Q⁶⁴.

15. (Previously Presented) The compound according to claim 2, a pharmaceutically acceptable salt thereof, or a prodrug of the compound or its salt, wherein Q is Q³ where R⁸ is a hydrogen atom or Q⁴ where R⁸ is a hydrogen atom.

16. (Previously Presented) The compound according to claim 2, a pharmaceutically acceptable salt thereof, or a

prodrug of the compound or its salt, wherein Q is Q¹⁷ where R⁷ is a hydrogen atom, Q³² where R⁷ is a hydrogen atom or Q²⁷ where R⁷ is a hydrogen atom.

17. (Previously Presented) The compound according to claim 1, a pharmaceutically acceptable salt thereof, or a prodrug of the compound or its salt, wherein Ar is an aromatic hydrocarbon group and A is -O-.

18. (Previously Presented) The compound according to claim 2, a pharmaceutically acceptable salt thereof, or a prodrug of the compound or its salt, wherein G is an optionally substituted straight-chained alkylene group having 2 - 15 carbon atoms.

19. (Original) The compound according to claim 18, pharmaceutically acceptable salts thereof, or prodrugs of the compound or its salts, wherein G is an optionally substituted straight-chained alkylene group having 2 - 13 carbon atoms.

20. (Original) The compound or substance according to claim 1, pharmaceutically acceptable salts thereof, or prodrugs of the compound or substance or their salts, wherein X² is any one group selected from the group consisting of - (CH₂)_pCO-NR⁸Z¹ (p represents an integer of at least 1, R⁸ represents a hydrogen atom, a straight-chained or branched lower alkyl group having 1 - 6 carbon atoms, and Z¹ represents

a hydrogen atom or a straight-chained or branched alkyl group having 1 - 10 carbon atoms that may optionally be substituted by a halogen atom), $-(\text{CH}_2)_p-\text{SO}_2-\text{Z}^1$ (p and Z^1 have the same meanings as defined above), $-(\text{CH}_2)_p-\text{SO}-\text{Z}^1$ (p and Z^1 have the same meanings as defined above), $-\text{Ph}-\text{O}-(\text{CH}_2)_p-\text{CO}-\text{NR}^8\text{Z}^1$ (Ph represents a phenylene group and p, R^8 and Z^1 have the same meanings as defined above), and $-\text{Ph}-\text{O}-(\text{CH}_2)_p-\text{H}$ (p has the same meaning as defined above).

21. (Original) The compound or substance according to claim 1, pharmaceutically acceptable salts thereof, or prodrugs of the compound or substance or their salts, wherein X^2 is any one group selected from the group consisting of - $(\text{CH}_2)_p-\text{COOH}$ (p is an integer of at least 1), $-(\text{CH}_2)_p-\text{OH}$ (p has the same meaning as defined above), $-\text{Ph}-\text{O}-(\text{CH}_2)_p-\text{COOH}$ (Ph represents a phenylene group and p has the same meaning as defined above), $-(\text{CH}_2)_p-\text{CO}-\text{NR}^8\text{Z}^2$ (p has the same meaning as defined above, R^8 represents a hydrogen atom or a straight-chained or branched lower alkyl group having 1 - 6 carbon atoms, Z^2 represents a straight-chained or branched alkyl group having 1 - 10 carbon atoms that is substituted by any one group selected from the group consisting of a cycloalkyl group, a hydroxyl group, a carboxyl group, a heterocyclic group and a phenyl group, or $-\text{NR}^3\text{Z}^2$ may be such that N, R^8 and Z^2 combine together to form a hetero ring), $-(\text{CH}_2)_p-\text{Ph}-\text{O}-(\text{CH}_2)_q-$

CO-NR⁸Z³ (Ph, p and R⁸ have the same meanings as defined above, q represents an integer of at least 1, and Z³ represents a hydrogen atom or a straight-chained or branched alkyl group having 1 - 10 carbon atoms that may optionally be substituted by any one group selected from the group consisting of a cycloalkyl group, a hydroxyl group, a carboxyl group, a heterocyclic group and a phenyl group, or -NR⁸Z³ may be such that N, R⁸ and Z³ combine together to form a hetero ring) and -(CH₂)_p-CH(COOH)-(CH₂)₃-CF₂-CF₃ (p has the same meaning as defined above).

22. (Original) The compound or substance according to claim 1, pharmaceutically acceptable salts thereof, or prodrugs of the compound or substance or their salts, wherein X¹ is any one group selected from the group consisting of - (CH₂)_p-COOH (p is an integer of at least 1), -(CH₂)_p-CH(COOH)-(CH₂)₃-CF₂-CF₃ (p has the same meaning as defined above), -(CH₂)_p-CH(COOMe)-(CH₂)₃-CF₂-CF₃ (p has the same meaning as defined above), -O-(CH₂)_p-COOH (p has the same meaning as defined above), -O-(CH₂)_p-CH(COOH)-(CH₂)₃-CF₂-CF₃ (p has the same meaning as defined above), -(CH₂)_p-S-(CH₂)₃-CF₂-CF₃ (p has the same meaning as defined above), -(CH₂)_p-SO-(CH₂)₃-CF₂-CF₃ (p has the same meaning as defined above), -O-(CH₂)_p-SO-(CH₂)₃-CF₂-CF₃ (p has the same meaning as defined above), -O-(CH₂)_p-SO₂-(CH₂)₃-CF₂-CF₃ (p has the same meaning as defined above), -Ph-O-(CH₂)₃-CF₂-CF₃ (p has the same meaning as defined above), -O-(CH₂)_p-SO₂-(CH₂)₃-CF₂-CF₃ (p has the same meaning as defined above), -Ph-O-

CH₃ (Ph represents a phenylene group), -Ph-O-(CH₂)_p-COOH (Ph and p have the same meanings as defined above), -(CH₂)_p-CO-NR⁸Z³ (p has the same meaning as defined above, R⁸ represents a hydrogen atom or a straight-chained or branched lower alkyl group having 1 - 6 carbon atoms, Z³ represents a hydrogen atom or a straight-chained or branched alkyl group having 1 - 10 carbon atoms that may optionally be substituted by any one group selected from the group consisting of a cycloalkyl group, a hydroxyl group, a carboxyl group, a heterocyclic group and a phenyl group, or -NR⁸Z³ may be such that N, R⁸ and Z³ combine together to form a hetero ring), -Ph-O-(CH₂)_p-CO-NR⁸Z³ (Ph, p, R⁸, Z³ and -NR⁸Z³ have the same meanings as defined above) and -O-(CH₂)_p-CO-NR⁸Z³ (p, R⁸, Z³ and -NR⁸Z³ have the same meanings as defined above).

23. (Previously Presented) The compound according

to claim 1, a pharmaceutically acceptable salt thereof, or a prodrug of the compound or its salt, which is selected from the group consisting of

17 β -hydroxy-7 α -{7-(N,N-dimethylaminocarbonyl)heptyl}-5-androstan-3-one;

17 β -hydroxy-7 α -{7-(N-ethylaminocarbonyl)heptyl}-5-androstan-3-one;

17 β -hydroxy-7 α -[7-(N-(isopropylaminocarbonyl)heptyl]-5-androstan-3-one;

17 β -hydroxy-7 α -[7-(N-methyl-N-butylaminocarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-(N,N-diethylaminocarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-(piperidinocarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-{N-(2-furylmethyl)aminocarbonyl}heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-{7-(N-methylaminocarbonyl)heptyl}-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-(N-methyl-N-ethylaminocarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-(N-methyl-N-propylaminocarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-(N-methyl-N-isopropylaminocarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-(N-methyl-N-benzylaminocarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-(1-pyrrolidinylcarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-(morpholinocarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[9-(N,N-dimethylaminocarbonyl)nonyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[9-(N,N-diethylaminocarbonyl)nonyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[9-(N-methyl-N-butylaminocarbonyl)nonyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[9-(N-methyl-N-propylaminocarbonyl)nonyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[9-(morpholinocarbonyl)nonyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[10-(N,N-dimethylaminocarbonyl)decyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-{N-(2-hydroxyethyl)aminocarbonyl}heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-(N-propylaminocarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-(N-benzylaminocarbonyl)heptyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[7-{N-(2-phenylethyl)aminocarbonyl}heptyl]-5 α -androstan-3-one;

17 β -hydroxy-11 α -[9-(N,N-diethylaminocarbonyl)nonyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[3-[3-{3-(N-methylaminocarbonyl)propoxy}phenyl]propyl]-5 α -androstan-3-one;

17 β -hydroxy-7 α -[3-[3-{3-(N,N-dimethylaminocarbonyl)propoxy}phenyl]propyl]-5 α -androstan-3-

one; and

17 β -hydroxy-7 α -[3-[3-{4-(1-pyrrolidinylcarbonyl)butoxy}phenyl]propyl]-5 α -androstan-3-one.

24. (Original) A substance which acts as antagonist against but not as agonist for the androgen receptor, or pharmaceutically acceptable salts thereof, or prodrugs of the substance or its salts.

25. (Original) A pharmaceutical composition containing as an active ingredient the compound or substance according to any one of claims 1 - 24, or pharmaceutically acceptable salts thereof, or prodrugs of the compound or substance or their salts.

26. (Original) An antiandrogenic agent containing as an active ingredient the compound or substance according to any one of claims 1 - 24, or pharmaceutically acceptable salts thereof, or prodrugs of the compound or substance or their salts.

27. (Original) An agent for preventing or treating a disease selected from prostate cancer, prostatomegaly, male pattern alopecia, sexual prematurity, acne vulgaris, seborrhea and hirsutism, said agent containing as an active ingredient the compound or substance according to any one of claims 1 - 24, or pharmaceutically acceptable salts thereof, or prodrugs